

What is claimed is:

1. A W-CDMA transmission rate estimation method  
2 comprising selecting a maximum likelihood transport  
3 format combination of a plurality of transport format  
4 combinations representing bit length combinations  
5 constituting a plurality of transport channels, each  
6 having a variable bit length, on the basis of  
7 correlation strengths between a normal encoded bit  
8 string and bit strings of data obtained by performing  
9 Viterbi decoding processing for data, of a reception  
10 output constituted by the respective transport channels,  
11 which corresponds to an arbitrary transport channel, and  
12 estimating a data transmission rate on the basis of the  
13 selected combination.

2. A method according to claim 1, further  
2 comprising using a plurality of path metric values  
3 calculated in the Viterbi decoding processing as values  
4 indicating the correlation strengths.

3. A method according to claim 2, further  
2 comprising storing, for each of the transport format  
3 combinations, a maximum path metric value obtained by  
4 using the transport format combination, and selecting a  
5 maximum likelihood transport format combination by  
6 comparing the stored maximum path metric values for the

7    respective stored transport format combinations.

4.            A method according to claim 2, further  
2    comprising concurrently calculating maximum path metric  
3    values, for the respective transport channels, which are  
4    obtained by concurrently performing the Viterbi decoding  
5    processing for the respective transport channels when  
6    the respective transport format combinations are used,  
7    statistically processing the respective path metric  
8    values obtained for the respective transport channels in  
9    units of transport format combinations, and selecting a  
10   maximum likelihood transport format combination on the  
11   basis of the statistical processing result.

5.            A W-CDMA transmission rate estimation device  
2    comprising transmission rate estimating means for  
3    performing Viterbi decoding processing for data, of a  
4    reception output constituted by a plurality of transport  
5    channels each having a variable bit length, which  
6    corresponds to an arbitrary transport channel, and  
7    selecting a maximum likelihood transport format  
8    combination of a plurality of transport format  
9    combinations representing bit length combinations  
10   constituting the respective transport channels, thereby  
11   estimating a data transmission rate.

6.            A W-CDMA transmission rate estimation device

2 for estimating a data transmission rate by performing  
3 Viterbi decoding processing for data, of a reception  
4 output constituted by a plurality of transport channels  
5 each having a variable bit length, which corresponds to  
6 an arbitrary transport channel, comprising:

7           maximum path metric comparing means for  
8 comparing a plurality of path metric values obtained for  
9 the respective transport format combinations when the  
10 transport format combinations are used in the Viterbi  
11 decoding processing, thereby selecting a maximum path  
12 metric value;

13           maximum path metric storage means for storing  
14 the maximum path metric value selected by said maximum  
15 path metric comparing means; and

16           estimating means for comparing the maximum  
17 path metric values for the respective transport format  
18 combinations stored in said maximum path metric storage  
19 means, and selecting a maximum likelihood transport  
20 format combination, thereby estimating a data  
21 transmission rate.

7.           A device according to claim 6, wherein

2           said maximum path metric comparing means and  
3 said maximum path metric storage means are provided in  
4 parallel for the respective transport channels,

5           said device further comprises statistical  
6 processing means for statistically processing the

7 maximum path metrics stored in said respective maximum  
8 path metric storage means for the respective transport  
9 format combinations, and  
10           said estimating means compares the statistical  
11 processing results obtained by said statistical  
12 processing means for the respective transport format  
13 combinations, and selects a maximum likelihood transport  
14 format combination, thereby estimating a data  
15 transmission rate.

[illegible]